

# Work Order ID 77154

**\*77154\***

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November 28, 2011 7:47:25 AM

Item ID: D2611 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Bearing  
 Start Date: 11/28/11 Start Qty: 24.00 **\*24\*** Cust Item ID:  
 Required Date: 12/01/11 Req'd Qty: 24.00 **\*24\*** Customer:  
 Reference:

Approvals: Process Plan: CL Date: 11/11/28 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2611	Rev C

100 PURCHASING 0.00  
**\*100\***  
 Purchasing Memo 0.00  
 Purchasing Issue P/O: 15534 Purchase part as per Dwg D2611 Possible supplier:  
 McMasterP/N: 63215K34 Material release note required

CL 11/11/28 (24)

110 Receive & Inspect for Damage & Mat'l Certs 0.00  
**\*110\***  
 Packaging Memo 0.00  
 Packaging Ensure certificate of conformity is attached

CL 11/11/28 (24)

120 QC6- Inspect dimensions to drawing 0.00  
**\*120\***  
 QC Memo 0.00  
 Quality Control

CL 11/11/30 (24)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 77154




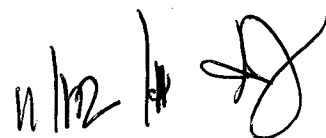
**\*77154\***

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Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: 	0.00							
<b>*130*</b>									
Packaging	Memo	0.00					11/11/30		
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
<b>*140*</b>									
QC	Memo	0.00							
Quality Control									

11.11.30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

November 28, 2011 7:47:25 AM

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Work Order ID: 77154

Parent Item: D2611

Parent Item Name: Bearing

Start Date: 11/28/11

Required Date: 12/01/11

Start Qty: 24.00

Required Qty: 24.00

Comments: IPP Rev:B99.06.23Re-formatDM  
Change to SS; Change Supplier- Rev.C 07.03.14 EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
63215K34 Bearing		Purchased	No				Each	0.0000		24			

*11/4/11 (24)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

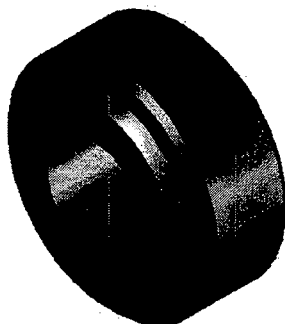
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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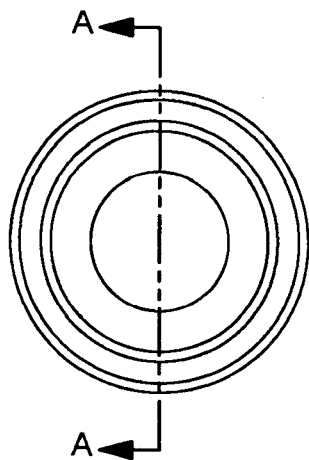


DESIGN <i>GP</i>	DRAWN BY <i>CB</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D2611	REV. C SHEET 1 OF 1
DATE 06.09.20	TITLE BEARING SCALE NTS		
REV	DATE	DESCRIPTION	
A	97.07.31	NEW ISSUE	
B	01.07.04	RE-DRAWN	
C	06.09.20	CHANGE TO SS; CHANGE SUPPLIER	

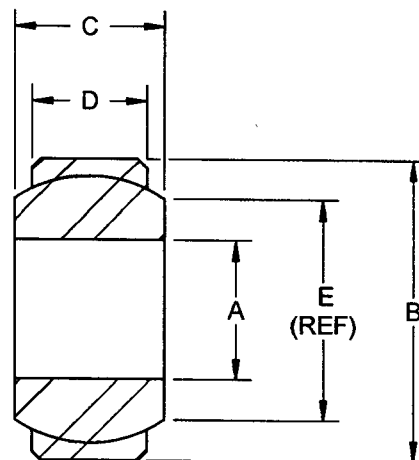
## SPECIFICATION CONTROL DRAWING



RELEASED  
06.11.17 *#*



*CLULUL28*  
*W10: 77154*



SECTION A-A

A	B	C	D	E (REF)	POSSIBLE SUPPLIER
0.375	0.813	0.406	0.313	0.592	McMASTER-CARR P/N 63215K34

### NOTES:

- 1) STAINLESS STEEL BALL JOINT SWIVEL BEARING
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO15534**

Purchase Order Date 11/25/11

PO Print Date 11/28/11

Page Number 2 of 2

**Order From :**

MCMaster-CARR SUPPLY CO,  
P.O. BOX 7690  
CHICAGO, IL 60680-7690  
US

VU-MCM001

**Contact Name**

**Vendor Phone** 330 995 5500

**Vendor Fax** 330 995 9600

**Vendor Account Nbr**

**Buyer**

Chantal Lavoie

**Requisition Nbr**

10127-2607

**Tax Resale Nbr**

Net 30

**Terms**

**Currency**

USD

**FOB**

Destination-Collect

5	3103A2 COUNTERBORE PILOT	11/30/11	No	12.00	FedEx PI collect	\$6.6700	\$80.04
				Each			

**Deliver To:** DAN.P

6	30075A47 KEY CHUCK	11/30/11	No	1.00	FedEx PI collect	\$354.7800	\$354.78
				Each			

**Deliver To:** CNC

7	63215K34 Bearing	11/30/11	Yes	24.00	FedEx PI collect	\$17.2400	\$413.76
				Each			

**Special Inst:** AS PER DWG D2611 REV. C  
B77154

8	2209K68 AIR FILTER	11/30/11	No	1.00	FedEx PI collect	\$10.5500	\$10.55
				Each			

**Deliver To:** CNC

9	60855K54 LEVELING MOUNTS	11/30/11	No	12.00	FedEx PI collect	\$7.2400	\$86.88
				Each			

**Deliver To:** ERIC.L

**PO Total:** \$1,095.01

**Change Nbr:** 5

**Change Date:** 11/28/11

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

200 Aurora Industrial Pkwy  
Aurora OH 44202-8087  
330-995-5500  
le.sales@mcmaster.com

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawkesbury ON K6A 1K7  
Canada

McMaster-Carr Number  
6300778-01

11/28/2011

LNS **A90**

Line	Description	Ordered	Shipped		
5	<b>3103A2</b> Changeable Counterbore Pilot, 1/8" Shank Diameter, 1/4" Pilot Diameter	12 Each	12	2 - 500	5
	Unit Price: \$6.67				
	Extended Price: \$80.04				
6	<b>30075A47</b> Albrecht Keyless Drill Chuck with Integral Arbor, #CP130-4MT, 4 Morse Taper Shank, 1/32"-1/2" Cap	1 Each	1	2 - 492	6
	Unit Price: \$354.78				
	Extended Price: \$354.78				
7	<b>63215K34</b> Stainless Steel Ball Joint Swivel Bearing, PTFE Lined, 3/8" ID, 13/16" OD, 13/32" Ball Thick	24 Each	24	3 - 482	7
	Unit Price: \$17.24				
	Extended Price: \$413.76				
8	<b>2209K68</b> Standard Pleated Polyolefin Panel Air Filter, 2 Each/Pack, 2" Thick, 20" X 25", Packs of 2	1 Pack	1	8 - 109	8
	Unit Price: \$10.55				
	Extended Price: \$10.55				
9	<b>60855K54</b> Heavy Duty Vibration-Damping Leveling Mount, with Stud, 1/2"-13 Thread, 300# Max Load	12 Each	12	1 - 324	9
	Unit Price: \$7.42				
	Extended Price: \$89.04				

Charges for this shipment

Merchandise Amount:	\$1,097.17
Sales Tax:	\$54.86
<b>Total:</b>	<b>\$1,152.03</b>